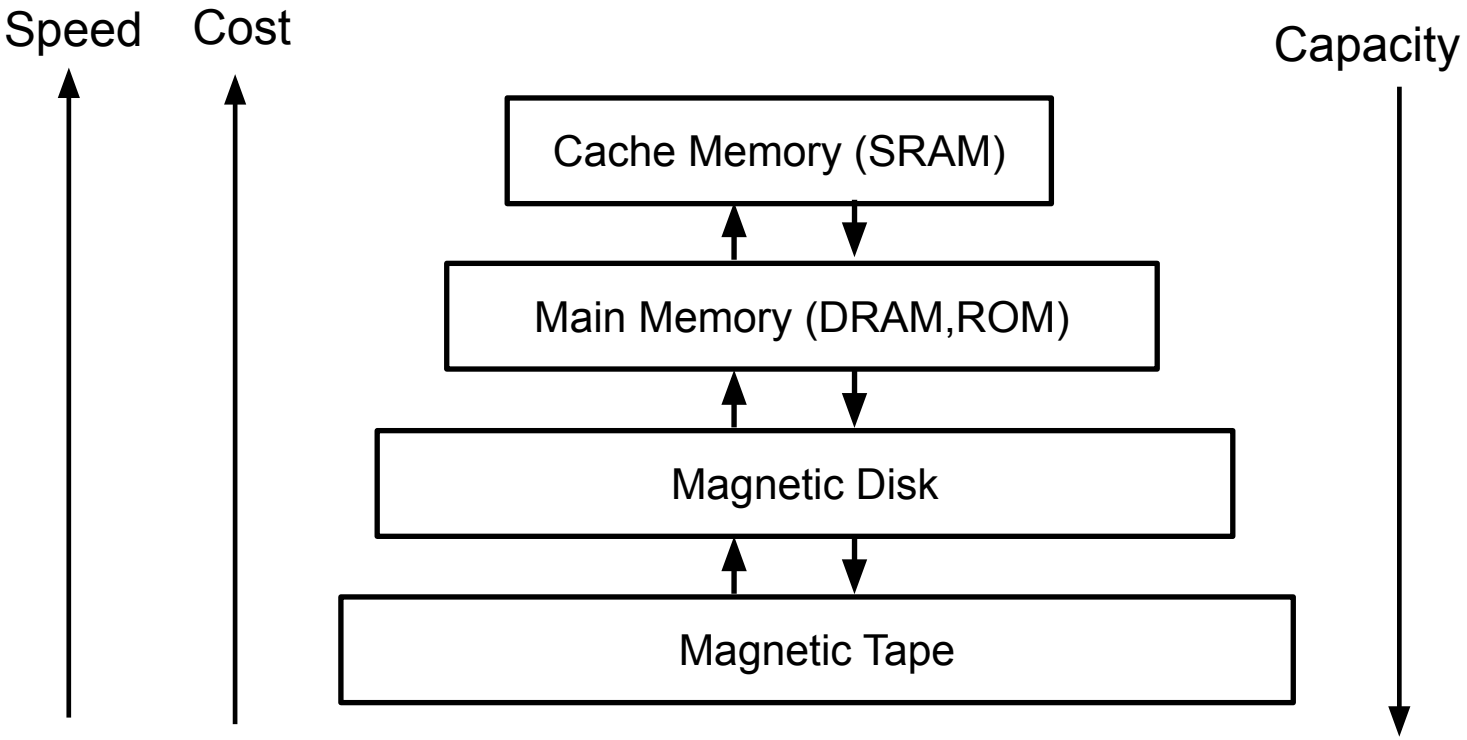
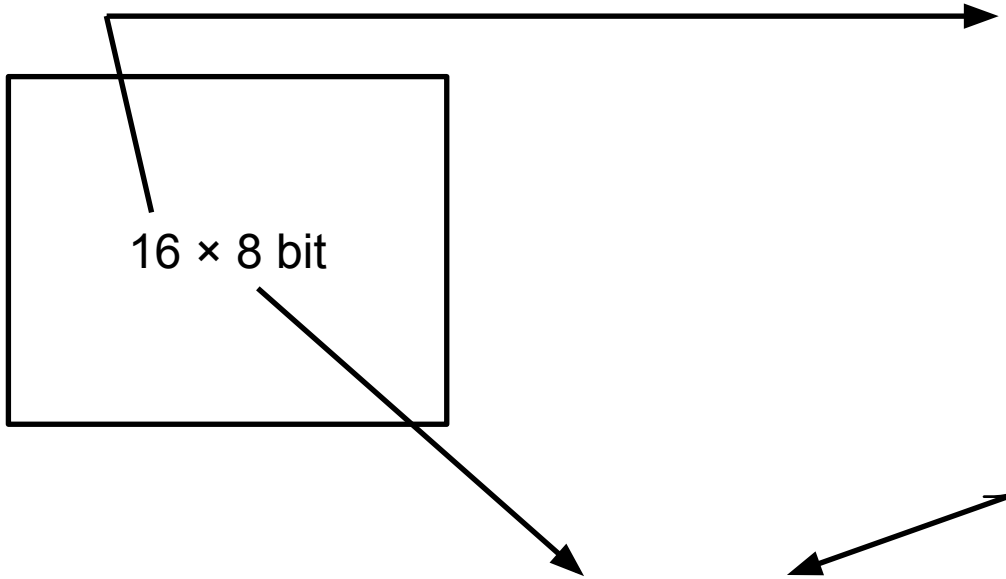
Memory Hierarchy



Memory hierarchy according to speed, size and cost

RAM and ROM Size



d7	d6	d5	d4	d3	d2	d1	d0

8 bit Data

Address	Data
0000	Data1
0001	Data2
0010	Data3
0011	Data4
0100	Data5
0101	Data6
0110	Data7
0111	Data8
1000	Data9
1001	Data10
1010	Data11
1011	Data12
1100	Data13
1101	Data14
1110	Data15
1111	Data16

Memory

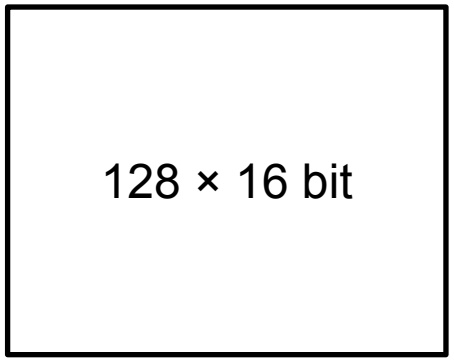
No. of address bits=$log_2 16 = 4$

No. of data bits= 8

No. of address bits=16 = 4

No. of data bits= 8

RAM and ROM Size contd.



No. of address bits= = 7 bit (A6-A0)

No. of data bits= 16 bit

No. of address bits=$log_2 128$ = 7 bit (A6-A0)

No. of data bits= 16 bit

Thank You